

## A B S T R A C T

A DEVICE FOR MAKING THIN POWDER LAYERS, IN PARTICULAR AT  
HIGH TEMPERATURES, IN A PROCESS BASED ON THE ACTION OF A  
5 LASER ON A MATERIAL

The invention relates to a device serving both to  
lay thin layers of powder and to compact them, the device  
being suitable for being located inside an apparatus  
10 containing a powder or powder mixture while it is  
subjected to the action of a laser. The device comprises  
a circular cylinder (12) provided with a longitudinal  
groove (15) formed in an outside surface of the cylinder  
(12). The cylinder also has a surface (12a) adapted to  
15 compact the powder that has been deposited on a  
deposition zone. By moving the cylinder in rotation and  
translation, the powder is brought to and deposited on a  
tray, on which the powder is then compacted by rotating  
the cylinder in the opposite direction. The invention  
20 enables very thin layers of ceramic or metallic powder to  
be laid in accurate and uniform manner inside a sealed  
thermal enclosure at a temperature lying between ambient  
temperature and about 1200°C.

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Translation of the title and the abstract as they were when originally filed by the  
35 Applicant. No account has been taken of any changes that may have been made  
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38.2, and/or 48.3.